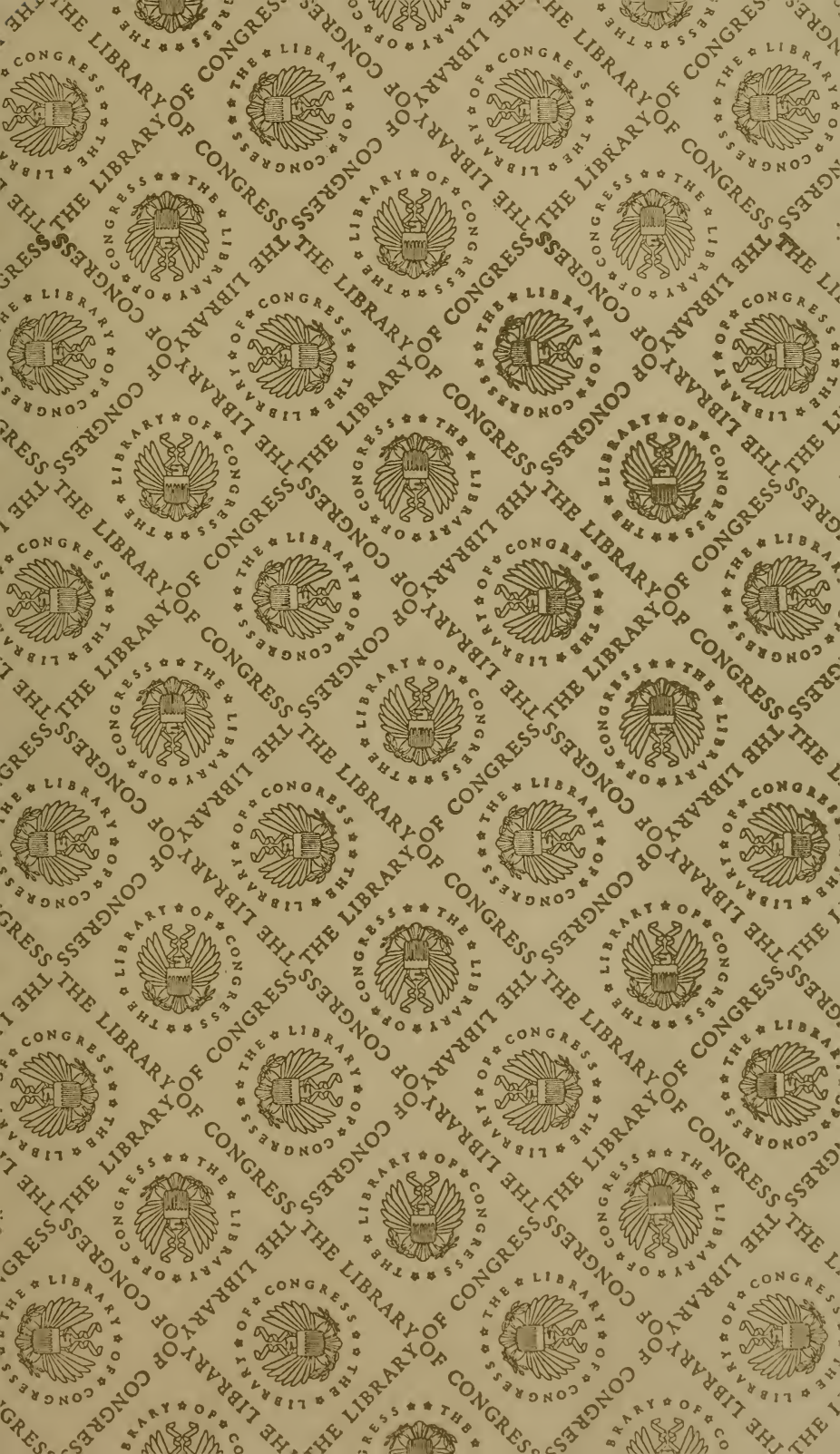
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ADDRESS

ON

THE PATENT LAWS,

DELIVERED BEFORE

THE FRANKLIN INSTITUTE,

AT THE

CLOSE OF THE ANNUAL EXHIBITION, PHILADELPHIA,
OCTOBER, 1849.

BY THE HON. JOHN K. KANE.

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INTRODUCTION.

As an application will be made, at the present session of Congress, with a view to certain modifications of the Patent Laws of the United States, it has been thought not improper to present the views entertained upon the subject by eminent judges of the courts of the United States. No man is entitled, both from his extensive legal and great scientific attainments, to higher consideration or regard than the Hon. JOHN K. KANE, District Judge of the United States for the Eastern District of Pennsylvania; and the accompanying Lecture, delivered by him before the Franklin Institute of Philadelphia, is earnestly recommended to the attention of Congress.

ADDRESS.

The Committee of Exhibitions have honored me with an invitation to make an address to you, this evening, and I have not felt myself at liberty to withhold so humble a contribution to the cause, of which our Institute is the eldest American representative. Yet, I am sensible that their selection has not been a happy one; for the course of thought and reading, to which a sort of necessity has adicted me for some years past, has been too exclusively professional to allow me the hope of engaging the favorable attention of a mixed audience.

Limited, from this cause, to a narrow range of topics, I have concluded to offer you a few remarks on the apparent imperfections of our system of Patent Laws—those laws which have for their object to protect and reward improvements in the useful arts. The number of such improvements, which must have attracted your notice in the present exhibition, may perhaps invest this subject with a certain degree of interest.

The policy, as well as duty, of returning to inventive genius a fair compensation for the benefits it has conferred upon society, is not in our times a topic for argument. In other countries its recognition may emanate from what is still called Royal Prerogative, but which is, in truth, only a trust, held in the name of an individual for the benefit of the many—or it may be referred more directly to the popular sense of expediency and justice, as expressed in acts of occasional legislation; but, among civilized States, it is known everywhere—sometimes as a boon of power, more frequently as a right. In our own land, it is expressly declared to be among the powers of Congress, "to promote the progress of sci-

ence and the useful arts, by securing, for limited times, to authors and inventors, the exclusive right to their writings and discoveries."

The earliest patent law of the United States was passed at the first Congress that assembled under the Constitution. It was, almost of course, imperfect; for, in the year 1790, no foreign nation had matured a system of provisions on the subject, from which ours could be profitably copied. Nevertheless, it was a good law, and contrasted favorably with the law of England of that day. Indeed, I have sometimes doubted whether, brief as it is, it does not furnish a better basis for the system than any of those which have followed it. But, be this as it may, the legislation of more modern times, if less perfect in its outline, has been progressively more and more liberal in its details; and the courts of justice have contributed, by the increasing liberality of their interpretations, to amplify the benefits of the system.

Yet it is still far from perfect; neither the patentee nor the public derives from it the full and appropriate measure of security and benefit. The author of a meritorious invention finds himself not unfrequently made poorer by the letters patent that profess to reward him; and the mechanical community is infested by swarms of impostors, who bear an apparent title, under the patent laws, to levy arbitrary exactions upon industry.

Let me explain how this happens: An ingenious man has invented a labor-saving machine, and obtained a patent for it. He has begun to use it himself, and has sold licenses to others. It is a highly useful machine, we will suppose, producing, it may be, an entire revolution in some branch of art; its usefulness universally admitted, by the unanimity with which it is adopted among his brother mechanics. It is, in a word, just the sort of invention that confers on society the highest benefit, and for which society is most anxious to reward him abundantly.

Now, just in proportion as his invention is valuable, just in that proportion is the temptation to defraud him of it. The invention is at once pirated; litigation follows; for his exclusive title is worthless, unless vindicated; and in this litigation, all who have invaded his rights, and all who have an interest in breaking them down, present a combined front against him.

Libraries are rummaged to find, in ancient books, dreamy, half-formed, unpractical notions, bearing more or less of the same com-

plexion with the matter of his invention; witnesses come from every quarter to tell of contrivances, like his in all but usefulness, that were once upon a time put together, in some rude imperfect mechanism, in some out-of-the-way place, and then abandoned. Old machines, that were in the Patent Office before it was burnt, come out from their ashes, refined, improved, gifted with new vigor, by the imaginative memory of old men, when talking of things of the olden time. Scientific theorists are called in, (and there are many such, as impracticable as they are honest, who can see nothing new in any new combination of known agents,) to puzzle us with their arguments, and to demonstrate that, as the lever, and the pulley, and the inclined plane, and the wedge, and the screw, are the cardinal elements of the patented machine, and so in fact it consists of nothing else, therefore the invention has no novelty, and the patent is void.

The poor inventor sits all this time in the court room, flushed and fevered, wondering much, and indignant, perhaps, as he hears that the invention, on which he has been wasting his strength and his fortunes for a lifetime, was known to all the world before he began, though no one thought of using it till he took out his patent, and every one uses it now.

But he has his witnesses also, his books, and his theorists; and, peradventure, he has been too poor or too wise to retain the ownership of his patent right, and, having sold it out to some corporation or some capitalist, he has become disinterested, and may be a witness himself, to detail in person the story of his invention.

The story has been told; and his case is now in the hands of his advocates—skilful and conscientious men—who have sought to master the subject, and have succeeded in so far reviving their college recollections of mechanical science, as to understand and explain the merits of their client.

Their first business is to teach the Judge his lesson; and this, if we may admit the testimony of the gentlemen of the Bar, is not always an easy one. There are few of us, indeed, that hold the judicial place, who must not confess our alienation from all other sciences except our own. The Law is a jealous mistress, that tolerates no divided affections or pursuit, among those who aspire to her favors.

But let us suppose this difficulty overcome, and that the Judge has succeeded during his intervals of leisure, as we term the lan-

guid intermissions between the exhausting sessions of his daily court, in studying as many treatises of mechanics as are indispensable to a knowledge of the subject. The next thing is to enlighten the jury—twelve men, gathered by lot from the streets and the byways, to render unanimous verdicts upon oath—unlearned men, whose office is to determine and apply scientific truths when the learned disagree—arbiters of art, often without one particle of instruction in its simplest dialect.

They retire to their jury room; and there, without books to enlighten them, but with an occasional newspaper perhaps to lead them astray by some distorted view of the evidence, or some ignorant commentary upon it, they begin their consultations for unanimity—stimulated not a little by the narrow comforts of a closely locked apartment, their "parlor, kitchen, and hall," on the floor of which, when night comes, they are permitted to spread their mattresses, and dream of that admirable procrustean device, the boast of Anglo-Saxondom, which claims to expand one conscience, and contract another, till they shall coincide. If, under circumstances so favorable to a harmonious conclusion of their labors, they obstinately refuse to think alike, they must be discharged at last; and the whole affair, with its witnesses and books and theories, its expenses and excitement, is to be begun over again, and again, and again, until twelve "sober and judicious men" are found to concur in the same "true verdict," upon their oaths.

For the sake of hurrying through this detail of incidents, with which all of us are familiar, let me imagine at once that a verdict has been rendered, that it is in favor of the patent right, and that the Judge is so far satisfied with it as to refuse the defendant's motion for a new trial, and that there is besides no legal excuse for submitting the final judgment by writ of error to a Court of Review. The patentee has triumphed—in one cause—against one defendant—in one judicial district. Each new defendant, each new cause, opens anew the whole question of the originality of his invention; and for each succeeding trial, in each of the thirty odd judicial districts of the United States, from New Hampshire to Texas, between Cape Cod and San Francisco, the patentee is to come, prepared with all his testimony, to encounter the same vexations, and abide the same hazard.

Is this the just and politic reward of inventive talent, for its

self-devotion to the public benefit? I have seen men, over and again, who had grown gray in litigation and penury, by seeking to vindicate for themselves the rights, which the faith of the Government was pledged that they should enjoy. I have known a patent, among the most meritorious that have done honor to our country, which, after the lapse of more than twenty years, had produced nothing to the inventor but barren praise and substantial wretchedness, still continuing to "hold the word of promise to the ear, and break it to the hope."

On the other side, I have said that the present patent laws do not secure to the public its just and stipulated share of advantages. Under the law now in force, inventions undergo a much more careful scrutiny before the patent issues, than used to be the case. But there are nevertheless numerous patent rights in existence, which are without essential merit, and which recoil from judicial scrutiny, either because of a want of originality in the patentee, an imperfect development of his alleged invention, or some other less innocent as well as less apparent defect of character.

The owners, or alleged owners, of these patent rights, are found from time to time in the neighborhood of our manufacturing establishments, denouncing infractions of their rights, threatening injunctions in Equity, and suits for damages at Common Law—but winding up generally with propositions for an amicable adjustment, on terms mutually advantageous. Like the applicant for office that Mr. Madison used to tell of, who began by asking for the emoluments of Secretary of the Treasury, but condescended, afterwards, to an Inspectorship of the Customs, and closed by soliciting a pair of cast-off breeches, these gentlemen become progressively more reasonable as their proffers are refused, and are generally content at last to accept, as a black-mail compromise, an amount somewhat smaller than would pay the expenses of a defence against them.

There is, indeed, no effective method, under our present patent laws, for testing the validity of an asserted patent right, without first violating it, and thus encountering the hazards of a suit for damages. You cannot compel the patentee to come forward and sustain his right beforehand. On the contrary, the law almost invites him to lie by and await infractions, as a spider waits for flies to infringe upon the fabric of his ingenuity, and only proves his strength after he has secured a victim to feel it.

You see at once what a dangerous power this leaves in the hands of an unprincipled patentee; how effectually, by the mere semblance of a patent right, he may deter others from the use of processes, or of machinery, to which he has no exclusive right in fact; since few men are sufficiently confident in their own opinions, or in the opinions of others, to invest large amounts of capital in a business of which the legality may be disputed, and which, if deemed unlawful by a court of justice, may be afterwards arrested by injunction or mulcted in exemplary damages. And thus, in the result, the public is restrained from the use of inventions which are in truth public property, having either been patented imperfectly or fraudulently, or never patented at all by the real inventor.

There may be, and no doubt there are, other defects in our system of patent laws; but these which I have indicated are among the most obvious and important. They are, besides, as ancient as the system itself, and have contributed from the first to impair its popularity as well as its usefulness. We have all of us known ingenious men, who refused to patent their discoveries, preferring rather to retain a precarious and difficult but exclusive enjoyment of them, by working in secret; and there are very few mechanicians who have not been indignant at the frauds to which the patent laws made it their policy to submit.

The injury which is retorted upon society by this imperfect protection of meritorious inventors, is more extended and full of consequences than it appears to be at first. The man who withholds an important discovery from the world does not make others poorer in merely the same degree in which he hopes to enrich himself. He limits the circle of useful art, to which the ingenious suggestions of other minds might have expanded his invention. He holds back from his fellows that strong incentive to progress, the knowledge of what another has achieved. He buries the talent which should have yielded increase. He is eating the seed wheat which should have ministered to the abundance of future harvests.

Yet it would seem as if these defects were none of them really inherent in a system for the protection of inventive genius, though the remedy for them might perhaps involve some startling changes in our venerable forms of forensic procedure.

No one who has studied political history can undervalue the trial by jury, as a safeguard of popular rights; but I have not yet found

the frank and well-practiced jurist who would be content to trust to its arbitrament an issue involving large familiarity with science, acute analysis, or continuous reasonings.

The metaphysics of social life, which we denominate the law, rarely challenge more refined and intricate discussions than some of the questions which arise under our patent laws. The difficulty which embarrasses the learned in both sciences is found, not in determining upon those abstract truths which we call fundamental principles, and which to them are always simple, if not obvious, but in selecting out from the mass of such truths those which apply most directly to the particular case, and then in assigning to each its appropriate share of influence or control; and a weary difficulty it often is, even for the best of us. But what must it be for those whose minds have undergone no special training in science—for whom there are no axioms, no starting points in argument, no definitions, no vocabulary, no alphabet even! For we think in words, and cannot begin to reason till we have been instructed in the language of argument.

Imagine the feeling of a conscientious juryman, who is required to decide a question on his oath, while he is absolutely ignorant of the very terms in which the question is expressed! And imagine, too, what confidence, what hope even, there can be for a party, that his rights will be understood and established by any action of twelve such jurymen! Except to compute the damages which a patentee has sustained, after his claim to damages has been made out, it is often difficult to apprehend what possible good office is to be rendered by a jury in a patent case. Does it not savor of the grotesque, to call upon such men as compose our juries to consider of the scientific controversies of chemists and mechanicians—to follow Professor Henry, perhaps, upon inductive electricity, in some dispute between the tetegraphs, or to analyze the merits of Mr. Tilghman's method for the alkaline chromates?

Now, why should this be? Why not refer these questions to men who understand them, or at least to men who can be taught to understand them? When an English judge of admiralty is required to pass upon a dispute involving nautical skill, he calls to his aid experts in the art of navigation, ancient masters of the Trinity House, and is indoctrinated by their counsels. In the same manner, the judge of a similar court in our own country invites two or more experienced shipmasters to hear the evidence and argu-

ments with him, whenever the question is one that appeals to a knowledge of seamanship and the sea. And, so far as I have heard, decisions made under such circumstances have in every instance satisfied the nautical community, if even they have not had the more extraordinary good fortune of convincing the parties to the litigation.

They have applied a similar practice in France to the determination of legal disputes between the holders of patent rights and those who are accused of infringing them. If the judge does not consider himself conversant enough with the art to which the invention belongs, to allow him to form a confident opinion, he appoints three artists, to inquire whether the alleged invention of the patentee is novel, and whether there has been an infraction of it by the defendant. The report which is made by this commission includes a full exposition of the questions of science or of art which are involved in the case. It is open to a free canvass afterwards, by the counsel of the parties, before the judge; and his adjudication follows. I should think this feature of the French system an excellent one. We have something analogous to it in our proceedings in equity, where we occasionally invite a similar report from scientific men; but I do not see why it should not be introduced also into our actions at law, as a substitute for the jury trial which we have inherited from the English system.

Nor do I see the necessity of leaving the public in uncertainty, as to the extent or validity of a patentee's rights, until some one has been daring enough to violate them, and they have been vindicated after the infraction. The question may be settled just as well before, more speedily as well as economically for the patentee, and much more safely and beneficially for the public. Here, again, I think the French law wiser than our own. "Every man," says one of its commentators, (*Perpigna, ch. 5, sec. 2,*) "before he begins a commercial undertaking which may require the investment of considerable capital, has a right to ascertain whether or not the supposed privilege exists; because, as the patentee proclaims his exclusive right, every one concerned in the trade, with which the patented invention may be more or less connected, is in constant fear of involuntarily infringing the patent right, and running the risk of a prosecution and condemnation for piracy." The very moment, therefore, a patent is granted under the laws of France, every one has a right to bring an action for the repeal of it."

Not only would I be disposed to allow every one to contest the validity of a patent right in advance of a lawsuit to recover damages for infringing it, but I would admit no controversy as to the validity of a patent, in a suit founded on its infraction. I would hold letters patent, under the great seal of the United States, to be conclusive evidence of their own validity, so long as they remain unrevoked by a judicial determination. But I would permit the man who is charged with violating them, as I would permit every other man, to institute proceedings for revoking them at any time.

Of course, such proceedings, to make them conclusive upon the public, must be well guarded against collusion and abuse. They should be conducted with great publicity, and preceded by ample notice. The specific grounds on which the patent is to be contested should be clearly and fully declared beforehand; all persons whatever should be allowed to join in sustaining them by facts and arguments; and the attorney of the United States for the district, or perhaps a professional representative of the Government, specially appointed to attend upon such investigations, should take part in the case, though without so controlling it as to thwart the action of others. But when such a controversy has been conducted publicly and fairly, I see no reason why the patent, if found fraudulent or defective, should not be declared to be so as to all the world, and thereupon revoked; nor why, if the patent has withstood successfully the assault of all comers, it should not be exempt from future controversy upon the points solemnly adjudicated in its favor, leaving it open to impeachment thereafter only upon grounds not before in contest.

A patent, renewed upon the expiration of its first term, for causes such as now justify a renewal, signal merits namely, and inadequacy of compensation for the good rendered to the public, I should hold for that reason alone protected against all further attack on the score of originality or usefulness. Fourteen years, either of general acquiescence in his title, or of successful litigation in defence of it, should earn for the meritorious and ill-rewarded patentee a parting season of repose. *Solve Senescentem.*

This is not an occasion that could tempt me to elaborate the details of such alterations as I have suggested; and I am sensible that it must be the work of more time, and more familiarity with our patent system, past as well as present, than belong to me. But

it is conceded that the law as it stands is sorely in need of revision; and it is perhaps the duty of every one, who has been constrained to remark its defects, frankly to suggest what appears to him the most simple and effective remedy.

I trust, too, that I shall not be thought to have chosen an improper forum before which to make these suggestions. There is no institution that exerts so important or so beneficial an influence over the inventive genius of our countrymen, as that before which I am standing at this time; there is no body of men among whom it is so easy to find intelligent and skillful counsellors upon every question which can interest our mechanics; and I do not know of any whose judgment I would so cheerfully refer to, on questions connected with the patent laws. No one who remembers what mechanics and the arts *were* in Philadelphia, and who sees what they *are*, but bears grateful testimony to the value of the lectureships of the Institute, its public meetings, the labors of its committees, its exhibitions, and its system of premiums, in elevating the tone of our industrial classes, improving their modes of work, stimulating the spirit of invention among them, and enlarging their sphere of thought.

The effect of all this action upon the further progress of mechanical science among us must go on continually increasing. In the old countries, as manufactures have become matured, the division of labor has had a manifest tendency to check improvement in the arts. The artificer, whose whole business of life is to graduate an arc, or to set the knife-edge of a scale-beam, will no doubt become apt at his work, but he cannot be expected to devise modifications of the theodolite or the balance. If he were even to imagine a change for the better in the work which forms his limited department, he could not carry it into effect, for he knows too little of the rest of the machine to enable him to modify its parts, so as to admit his improvement.

But here—thanks to the Franklin Institute, which has made our mechanics mechanicians—and thanks, too, to our system of common schools, which encircles us with a community of intellectual men—and thanks, more than all, to the spirit of our political Institutions, which stamps Progress on everything within and around us—the American artificer cannot be made to cramp down his thought to the single object of his daily toil. He has asserted his claim to the dignity and the rights of manhood, "looking before

and after," at the past from which he has risen, upon the future to which he aspires. It may be that he makes a horse-shoe nail more slowly or less neatly than his European grandfather of the trade was wont to do, but he is thinking out a machine which will make it for him twice as well and a hundred times faster.

To such a man, the teachings of the Institute are of inestimable value. Besides the acquaintance which they give him in those deparments that are kindred to his own, they suggest to him topics of inquiry and experiment, making him familiar with what others have done already, and distinguishing for him between that which lies within the possible limits of art, and that which the laws of nature have placed beyond them—thus dividing him by a broader line from that ancient fraternity of empirics, the so-called practical men, the self-taught, self-conceited, self-vaunting blunderers of the workshop.

I have only one more observation to make, and I pray that it may be received with indulgence. The power, which is appropriate to an institution constituted and conducted as this has been, imposes a corresponding responsibility on its members. I do not mean in their aggregate capacity—that is too obvious to call for remark. But the reputation of the entire body is reflected upon its members; and each of them exerts, however unconsciously, an influence which should not be misdirected. The number of new inventions, which is called for by the growing competition of industry in all its walks, and which the utmost efforts of mechanical ingenuity are scarcely adequate to satisfy, is daily making it more and more difficult to define the exact extent of each man's rights as an inventor. What combination shall be regarded as essentially new, where the elements employed are old, and both the object and the result are old also, is sometimes a question of the nicest casuistry. As a consequence, all who have interests to subserve, either by the success or the overthrow of a controverted patent right, are indefatigable in their efforts to secure in advance the testimonials of scientific men in their behalf—well knowing how powerfully these may be employed in preoccupying public sentiment. The importance which so justly attaches to your opinions, gentlemen of the Institute—the difficulty, not always apparent at a glance, of arriving at correct conclusions without special examination—and the magnitude of the interests which may be affected injuriously by a judgment hastily expressed—these, together, from

an argument for the gravest caution, whenever you are individually solicited to take a position either favorable or adverse to the claims of a patentee.

In conclusion, I perform a most grateful office in congratulating my brother members of the Institute upon its condition and prospects, and thanking them for the attention and courtesy with which they have listened to me.